

PRACTICING IPM: POLICY AND ISSUES
NATIONAL FOREST SYSTEM PROSPECTIVE
Larry Henson 1/

#1561
Regional Forester Larry Henson would have really enjoyed being here and sends his regrets. He was asked to be available for the Gramm-Rudman-Hollings Bill Hearings and could not make this meeting. Larry is most pleased with the timeliness of this symposium and wishes for a most successful sharing of information.

CHANGING TIMES

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Forces that are causing change:

- Public attitude...more subtle than most appreciate.
- Most of the population is 2-3-4 generations from the farm.
- Most have access to unbelievable volumes of information; i.e., television.
- National economic problems that require less government spending and less manpower.
- Advances in technology occurring in industry and government....office automation, distributive processing, etc. causing substantial cutbacks in middle management.
- Need for economic efficiency...decisions will be based on economics, except in people-sensitive areas.
- Land Management Plans
- The public's interest and involvement with National Forest management. A primary force for change and for support.
- Major bug problems that have caught the public's attention; i.e, southern pine beetle, gypsy moth, spruce budworm, grasshoppers in the West, medfly.

The public, too, plays an important part in our decisionmaking process. In the past, we have tended, as natural resource managers, to make decisions based upon our "professional" judgment with little regard for public opinion. The public has heard for a couple of decades now, almost weekly, about the hazards of chemicals: The Silent Spring (DDT), Love Canal, Agent Orange, PCB, and on and on. There has been valid reason for public concern because of what has happened in the past.

1/ Regional Forester, Region 9, USDA Forest Service, Milwaukee, WI, 53203. Remarks delivered by Ken Henderson, Forest Supervisor, Shawnee National Forest, Harrisburg, IL 62946

ISSUES FOR NATIONAL FOREST MANAGEMENT

Our mission will be accomplished with less people, less money, and no reduction in quality. We will not be able to afford mistakes or half-cooked strategies.

Techniques for implementing IPM strategies must be developed more fully and communicated to the user at the ground level.

We must improve our ability to predict events.

We must be tuned in to the overall change taking place in forest conditions--

- Have we created too much of a monoculture in some softwood areas?
- How old are some of our forests and when will age begin making large areas ripe for insect or disease epidemic?
- What public attitudes or perceptions will need to be dealt with?
- Use of chemicals is a growing public concern; are there better alternatives?
- Are the costs worth it?
- We must listen better to the public to better understand their attitudes and concerns.

Need for effective strategic planning for IPM to cope with potential threats to National Forest land.

We must do a better job of defining benefit and costs because of national budget problems. Taxpayers will not stand for funding projects that don't return more benefits than costs, although many of these benefits are non-market values that are hard to quantify.

All our resource disciplines must be involved and we must start by asking---why we should use a particular pesticide or herbicide?---what are we trying to accomplish and why? It may help to look at some traditional pest management decisions from past years to talk about alternatives.

Spruce Budworm

I'm not an entomologist but I have observed the periodic outbreaks of spruce budworm over the last 25 years. It seems, in the northeast, that when conditions become right (age and distribution of balsam fir) we have serious outbreaks of spruce budworm and, if let alone, high balsam fir mortality. Our previous reaction to these outbreaks was to try to spray chemicals to kill the budworm and save the balsam fir. Why protect the balsam and are there other ways to do it?

Balsam fir, in most of the northeastern National Forests, is not a high-value, marketable species. Oh yes, we can sell it, but not cost efficiently. Economics should play a major part in our decisionmaking process. If we can't sell a product at a net plus of dollars and other benefits, why should we protect it from the spruce budworm? Some will say the esthetic value of the balsam fir will justify the treatment. In some cases this may be true but not in most cases.

Is there a way to prevent periodic outbreaks of spruce budworm? We can prevent the spruce budworm if we prevent conditions favorable for the outbreaks. In other words, by preventing large contiguous blocks of balsam at the susceptible age class. This may require shorter rotation ages for balsam and a deliberate attempt to break up the distribution. This can be done with carefully planned timber sales. Even in this case, we are still faced with the low marketability of balsam fir. We can work on marketability and cost/benefit by finding cheaper ways to prepare the timber for harvest. If we cannot find acceptable economic ways to prevent the balsam fir conditions that lead to spruce budworm, the best choice is probably to let the balsam go to the budworm.

Other factors must be considered in deciding whether to treat a budworm infestation--such as the fire risk associated with vast tracks of dead balsam. These kinds of factors must be thought about before outbreaks occur, by integrated resource disciplines working together to make sure we know what we want to do before outbreaks occur.

Conversion of aspen and/or northern hardwoods to softwoods

This practice has had its time and place in the history of the northeastern National Forests but is becoming more and more difficult to justify. The conversion, in most cases, involved the use of herbicides for site preparation and/or release. The objective was to grow more red pine and less aspen. This objective was based upon timber supply/demand projections that have become outdated.

Our forest planning process has taught us that we are not going to run out of softwoods in the foreseeable future, and aspen is a good substitute for many things we once thought only softwoods could be used for. New technology and wood substitutes have remarkably changed the wood supply/demand equations.

Economics and new technology together have changed the rationale for large-scale conversion projects. This illustrates our need to frequently review our objectives to assure ourselves we are headed in the right direction when using a chemical that so greatly concerns our public.

Herbicides are still needed in many cases just to maintain softwoods on softwood sites.

HOW DO WE BRING ALL THIS TOGETHER AND GET RESULTS?

The key to accomplishing IPM is involving ALL resource disciplines in the decisionmaking process. Each federal, state, county, or private organization has different missions, laws, regulations, and objectives. There is no single approach to IPM for everyone. We must respect and recognize these differences.

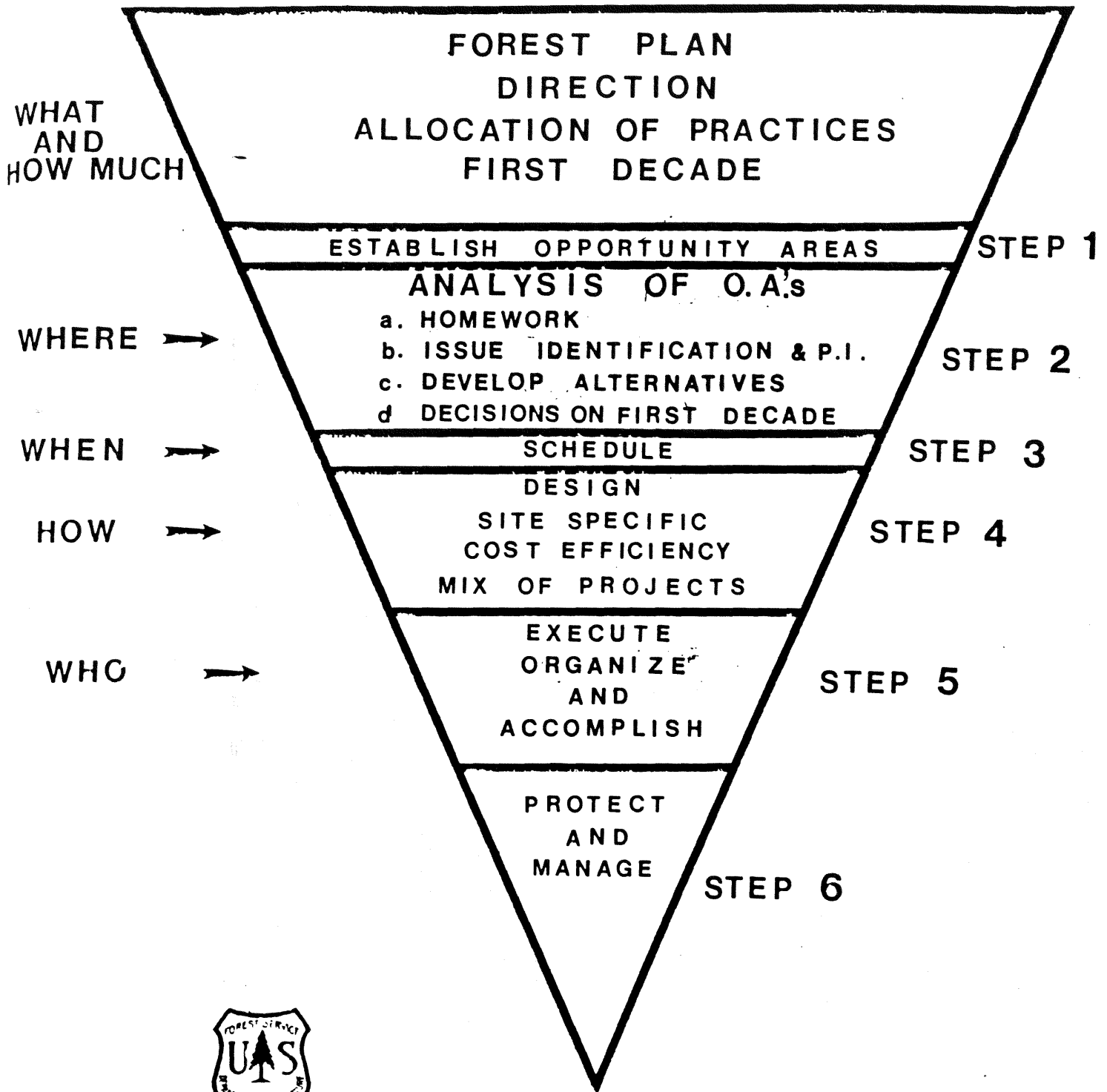
Integrated Resource Management (IRM) is the keystone to all management activities.

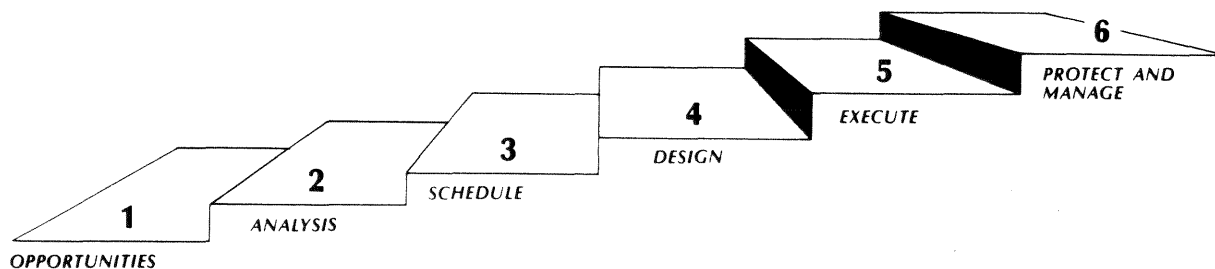
Region Nine's Approach

The Forest Service is committed to and embarking on a course of implementing forest plans. This will require a game plan--let's call it an approach--to make it work. IRM provides the approach. IRM is teamwork designed to unify people and manage the resources in an integrated manner. Every person needs to know their role, what is expected, and when to do it.

Our approach to forest plan implementation is IRM. It begins with the forest plan and includes the following six steps:

EXHIBIT - OVERHEAD PROJECTOR: INTEGRATED RESOURCE MANAGEMENT

BREADTH OF DECISION SPACE



OPPORTUNITIES - Identify areas of land that offer the best opportunities to implement the forest plan.

ANALYSIS - Spatially arrange the desired future condition and identify projects to ensure an integrated approach to forest management.

SCHEDULE - Schedule and budget projects that best meet forest plan management direction.

DESIGN - Design projects to include integration needs for all resources and values.

EXECUTE - Complete projects as designed.

PROTECT AND MANAGE - Be a Good Host and provide for public health and safety. Protect and manage resources and property values.

As you review the IRM process and look at the following definition of IPM, it's easy to see how these processes can and must work closely together.

Definition of Integrated Pest Management: A systematic decisionmaking process and resultant management actions that derive from considering pest host systems and evaluating alternatives for managing pest populations at levels consistent with resource management objectives.

IPM--AN OLD CONCEPT WHOSE TIME HAS COME

Effective application of IPM requires a high level of professionalism from several disciplines through the entire forest management process--forest plans through project implementation.

Forest plans, developed to meet public expectations, are trending toward more natural regeneration with more stand and forest diversification of species composition and age class distribution resulting in healthier forests. An obvious application of IPM.

We need to do a better job of formulating IPM strategies and tactics. No plan is the plan. Decisions need to be made and communicated internally and publicly concerning:

- Silvicultural tactics for prevention.
- Intensity of detection.
- Target mortality vs. salvage and/or control activities.

A strong IPM program will help managers apply the NEPA process to management projects.

The National Forests can go in no other direction...we must consider applying IPM principles in all aspects of forest management.

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